

Title (en)

Polyhydroxyalkanoate copolymer including unit having bromo group in side chain and method for producing the same

Title (de)

Polyhydroxyalkanoat Copolymer mit einer ein Bromatom enthaltenden Einheit in der Seitenkette und Verfahren zur Herstellung desselben

Title (fr)

Copolymere de polyhydroxyalkanoate possédant une unité ayant un groupe bromo dans la chaîne latérale et un procédé pour sa préparation

Publication

EP 1336634 A3 20040107 (EN)

Application

EP 03003418 A 20030214

Priority

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- JP 2002362594 A 20021213

Abstract (en)

[origin: EP1336634A2] The invention provides polyhydroxyalkanoate having a bromo group in a unit and being thermally stable and capable of arbitrarily controlling physical properties, and a producing method thereof. According to the invention, there are provided a polyhydroxyalkanoate copolymer including a 3-hydroxy- omega -bromoalkanoic acid unit represented by a formula $\text{-}\ddot{\text{O}}\text{CH}((\text{CH}_2)_n\text{Br})\text{CH}_2\text{C}(\text{O})\ddot{\text{O}}\text{-}$ ($n=1$ to 8) (1) and a unit represented by a formula $\text{-}\ddot{\text{O}}\text{CH}((\text{CH}_2)_m\text{R})\text{CH}_2\text{C}(\text{O})\ddot{\text{O}}\text{-}$ (2) within a same molecule, and a method for producing a polyhydroxyalkanoate copolymer by microorganisms, utilizing a omega -bromoalkanoic acid represented by a formula $\text{Br}(\text{CH}_2)_p\text{CH}_2\text{CH}_2\text{COOH}$ ($p=1$ to 8) (20) and a compound represented by a formula $\text{R}(\text{CH}_2)_q\text{CH}_2\text{CH}_2\text{COOH}$ (21) as raw materials. (In the formulae, R designates a residue selected from the group consisting of a phenyl structure, a thienyl structure and a cyclohexyl structure. m and q are integers selected from 1 to 8 respectively, provided it may be 0 when R designates the cyclohexyl structure. n and p designate integers within the ranges in the formulae respectively. These respective residues and integers in one unit are independent of respective one in another unit.) <IMAGE>

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Citation (search report)

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